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	Search Terms L1 same pror	Documents noter 8							
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DB=USPT,PGPB, <u>L2</u>	<pre>JPAB,EPAB,DWPI; PLUR= L1 same promoter</pre>	IES; UP=ADJ	8 <u>L2</u>						

124

<u>L1</u> ·

END OF SEARCH HISTORY

<u>L1</u>

ABC1 or ABCB1

## west

Generate Collection

Print

## Search Results - Record(s) 1 through 8 of 8 returned.

1. Document ID: US 20030021802 A1

L2: Entry 1 of 8

File: PGPB

Jan 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030021802

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030021802 A1

TITLE: Lawsonia intracellularis proteins, and related methods and materials

PUBLICATION-DATE: January 30, 2003

INVENTOR-INFORMATION:

NAME

CITY

STATE

COUNTRY

RULE-47

Rosey, Everett L.

Preston

CT

US

US-CL-CURRENT: 424/190.1; 435/219, 435/252.3, 435/320.1, 435/69.3, 536/23.2

Full Title Citation Front Review Classification Date Reference Sequences Attachments Claims KWIC Draw Desc Image

2. Document ID: US 20020146792 A1

L2: Entry 2 of 8

File: PGPB

Oct 10, 2002

PGPUB-DOCUMENT-NUMBER: 20020146792

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020146792 A1

TITLE: Regulatory nucleic acid for the ABC1 gene, molecules modifying its activity

and therapeutic uses

PUBLICATION-DATE: October 10, 2002

INVENTOR - INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47			
Rosier-Montus, Marie-Francoise	Antony	MD	FR	•			
Prades, Catherine	Thais	MD	FR				
Lemoine, Cendrine	Massy	MD	FR				
Naudin, Laurent	Etampes		FR				
Denefle, Patrice	Saint Maur		FR				
Duverger, Nicolas	Paris		FR				
Brewer, Bryan	Potomac		US				
Remaley, Alan	Bethesda		US				
Santamarina-Fojo, Sylvia	Potomac		US				

US-CL-CURRENT:  $\frac{435}{189}$ ;  $\frac{435}{320.1}$ ,  $\frac{435}{325}$ ,  $\frac{435}{6}$ ,  $\frac{536}{23.2}$ ,  $\frac{800}{8}$ 

3. Document ID: US 20020076754 A1

L2: Entry 3 of 8

File: PGPB

Jun 20, 2002

PGPUB-DOCUMENT-NUMBER: 20020076754

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020076754 A1

TITLE: Overcoming AAV vector size limitation through viral DNA hetero-dimerization

PUBLICATION-DATE: June 20, 2002

INVENTOR - INFORMATION:

CITY NAME

STATE

COUNTRY

RULE-47

Sun, Liangwu

Pittsburgh

PA PΑ IIS US

Li, Juan Xiao, Xiao Pittsburgh Wexfoxd

PΑ

IIS

US-CL-CURRENT: 435/69.1

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KMC Draw Desc Image

4. Document ID: US 6225525 B1

L2: Entry 4 of 8

File: USPT

May 1, 2001

US-PAT-NO: 6225525

DOCUMENT-IDENTIFIER: US 6225525 B1

TITLE: ATP-binding cassette transporter (ABC1) modified transgenic mice

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KWMC Draw Desc Image

5. Document ID: EP 1203588 A1

L2: Entry 5 of 8

File: EPAB

May 8, 2002

PUB-NO: EP001203588A1

DOCUMENT-IDENTIFIER: EP 1203588 A1

TITLE: Sterol-independent regulation of ABC1 promoter via oncostatinM

Full Title Citation Front Review Classification Date Reference Sequences Attachments

KilliC Drawi Desc Image

6. Document ID: WO 200183506 A1 AU 200159209 A

L2: Entry 6 of 8

File: DWPI

Nov 8, 2001

DERWENT-ACC-NO: 2002-049334

DERWENT-WEEK: 200222

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Novel isolated human large ATP-binding cassette transporter 1 promoter capable of directing transcription of heterologous coding sequence positioned



downstream to it, useful for expressing foreign DNA in host cells

Full Title Citation Front Review Cla	ssitication Date Reference Sequences	Attachments   KWWC   Draw, Desc   Image				
7. Document ID: EP	1239848 A2 WO 20011567	/6 A2 AU 200112919 A				
L2: Entry 7 of 8	File: DWPI	Sep 18, 2002				
ERWENT-ACC-NO: 2001-244356 ERWENT-WEEK: 200269 OPYRIGHT 2003 DERWENT INFO						
evel, a higher than normal	triglyceride level, o	lipoprotein-cholesterol (HDL-C) r a cardiovascular disease, by XR-mediated transcriptional				
Full Title Citation Front Review Cla	ssification Date Reference Sequences	Attachments   KWIC   Draw Desc   Image				
<del></del>	O 200055318 A2 AU 20003					
L2: Entry 8 of 8	File: DWPI	Sep 21, 2000				
ERWENT-ACC-NO: 2000-587528 ERWENT-WEEK: 200055 OPYRIGHT 2003 DERWENT INFO						
TITLE: New ABC1 polypeptide iological activity, e.g. A	e is useful for treatin lzheimer's disease, Hu	g diseases associated with ABC1 ntington's disease and cancer				
Full Title Citation Front Review Cla	ssification Date Reference Sequences	Attachments   KMMC   Draw Desc   Image				
	Generate Collection	Print				
·	Terms	Documents				
L1 same promoter		8				
Disp	lay Format: - Cha	ange Format				
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Previous Page Next Page

(FILE 'HOME' ENTERED AT 12:20:59 ON 07 MAR 2003)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 12:21:14 ON 07 MAR 2003

## SEA ABC1 OR ABCB1

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1 FILE ADISCTI
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- 3 FILE ADISINSIGHT
- 1 FILE ADISNEWS
- 13 FILE AGRICOLA
- 1 FILE AQUASCI
- 1 FILE BIOBUSINESS
- 3 FILE BIOCOMMERCE
- 145 FILE BIOSIS
- 19 FILE BIOTECHABS
- 19 FILE BIOTECHDS
- 82 FILE BIOTECHNO
- 32 FILE CABA
- 37 FILE CANCERLIT
- 199 FILE CAPLUS
  - 8 FILE CIN
  - 2 FILE CONFSCI
  - 7 FILE DDFU
- 1004 FILE DGENE
  - 3 FILE DRUGNL
  - 11 FILE DRUGU
  - 3 FILE DRUGUPDATES
  - 4 FILE EMBAL
- 104 FILE EMBASE
- 98 FILE ESBIOBASE
- 13 FILE FEDRIP
- 33 FILE FOMAD
- 6 FILE FSTA
- 913 FILE GENBANK
  - 9 FILE IFIPAT
  - 5 FILE JICST-EPLUS
- 57 FILE LIFESCI
- 142 FILE MEDLINE
- 44 FILE PASCAL
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- 9 FILE PHIN
- 698 FILE PROMT
- 167 FILE SCISEARCH
- 76 FILE TOXCENTER
- 89 FILE USPATFULL
- 2 FILE USPAT2
- 32 FILE WPIDS
- 32 FILE WPINDEX

QUE ABC1 OR ABCB1

FILE 'PROMT, CAPLUS, SCISEARCH, BIOSIS, MEDLINE, EMBASE' ENTERED AT 12:22:07 ON 07 MAR 2003

L2 78 S L1 AND PROMOTER

L1

L3

- 37 S L2 AND SEQUENCE
- L4 23 DUP REM L3 (14 DUPLICATES REMOVED)

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L4 ANSWER 1 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2002:353609 CAPLUS

DOCUMENT NUMBER: 136:364963

TITLE: Polymorphisms in the human ABCA1 gene associated with

disorders of lipid transport and their diagnostic and

therapeutic uses

INVENTOR(S): Denefle, Patrice; Rosier, Marie-Francoise;

Arnould-Reguigne, Isabelle; Duverger, Nicolas;

Cambien, Francois

PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.; Institut National de la

Sante et de la Recherche Medicale (INSERM)

SOURCE: PCT Int. Appl., 296 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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KIND DATE
                                         APPLICATION NO. DATE
    PATENT NO.
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                                          ______
                                         WO 2001-FR3182 20011012
    WO 2002036770
                     - A2
                           20020510
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
            PT, RO, RU
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                         FR 2000-14037
                                                         20001031
                     A1
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    FR 2815970
                                          AU 2002-10636
    AU 2002010636
                      Α5
                           20020515
                                                          20011012
                                       FR 2000-14037 A 20001031
PRIORITY APPLN. INFO.:
                                       US 2000-254108P P 20001211
                                       WO 2001-FR3182 W 20011012
```

The invention concerns isolated nucleic acids coding for the ABCA1 carrier protein and comprising sequence polymorphic variations, and polypeptides derived from the human ABCA1 carrier and contg. polymorphic amino acids. The invention also concerns allele-specific primers and probes hybridizing to regions flanking or contg. said polymorphic sites or positions, methods and kits or sets for analyzing the allelism variations affecting the ABCA1 gene and finally the use of polymorphisms of the human ABCA1 gene for diagnosing a disease or a predisposition to a disease, in particular related to the concn. of plasmatic cholesterol High D. Lipoprotein (HDL), as for example is the case in familial HDL deficiencies such as Tangier disease, myocardial infarction, atherosclerosis, and other cardiovascular diseases.

L4 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2002:466615 CAPLUS

DOCUMENT NUMBER:

137:42598

TITLE:

Methods of overcoming adeno-associated virus vector size limitation through viral DNA hetero-dimerization

INVENTOR(S):

Sun, Liangwu; Li, Juan; Xiao, Xiao

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

. 1

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO. DATE

US 2002076754 A1 20020620 US 2001-838786 20010420 PRIORITY APPLN. INFO.: US 2000-198673P P 20000420

The present invention provides a method for overcoming the packaging limitations of recombinant adeno-assocd. virus (AAV) particles through AAV DNA heterodimer formation. Specifically, the invention discloses that an expressed nucleic acid, typically a portion of a gene encoding a full-length therapeutic protein, or a functional deriv. thereof, is split into two or more fragments by the insertion of one or more introns. Each intron is then split and each of the gene portions are inserted between AAV inverted terminal repeats (ITRs) for packaging into recombinant adeno-assocd. virus particles. The recombinant viral particles are then co-infected into a target cell. Once inside the cell, the viral vectors form head-to-tail heterodimers through sequence homol. of the inverted terminal repeats, thereby re-forming the intron. During mRNA maturation, the intron is spliced from the continuous DNA mol., removing the intron and, thus, the intervening ITR sequences, thereby restoring the precise coding sequence of the expressed nucleic acid: The invention further provides virus vectors expressing .beta.-galactosidase, dystrophin, ABC1, and factor VIII.

L4 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:937303 CAPLUS

DOCUMENT NUMBER:

138:20443

TITLE:

Endocrine disruptor screening using DNA chips of

-----

endocrine disruptor-responsive genes

INVENTOR(S):

Kondo, Akihiro; Takeda, Takeshi; Mizutani, Shigetoshi;

Tsujimoto, Yoshimasa; Takashima, Ryokichi; Enoki,

Yuki; Kato, Ikunoshin Takara Bio Inc., Japan

PATENT ASSIGNEE(S): SOURCE:

Jpn. Kokai Tokkyo Koho, 386 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

JP 2002355079 A2 20021210 JP 2002-69354 20020313

PRIORITY APPLN. INFO.: JP 2001-73183 A 20010314

JP 2001-74993 A 20010315

JP 2001-102519 A 20010330

AB A method and kit for detecting endocrine-disrupting chems. using DNA microarrays are claimed. The method comprises prepg. a nucleic acid sample contg. mRNAs or cDNAs originating in cells, tissues, or organisms which have been brought into contact with a sample contg. the endocrine disruptor. The nucleic acid sample is hybridized with DNA microarrays having genes affected by the endocrine disruptor or DNA fragments originating in these genes have been fixed. The results obtained are then compared with the results obtained with the control sample to select the gene affected by the endocrine disruptor. Genes whose expression is altered by tri-Bu tin, 4-octaphenol, 4-nonylphenol, di-N-Bu phthalate, dichlorohexyl phthalate, octachlorostyrene, benzophenone, diethylhexyl phthalate, diethylstilbestrol (DES), and 17-.beta. estradiol (E2), were found in mice by DNA chip anal.

L4 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2002:733317 CAPLUS

DOCUMENT NUMBER:

138:101359

TITLE:

Intergenomic transcriptional interplays between plastid as a cyanobacterial symbiont and nucleus

AUTHOR(S): Takahashi, Hideo; Tanaka, Kan

CORPORATE SOURCE:

Institute of Molecular and Cellular Biosciences, The

SOURCE:

University of Tokyo, Bunkyo-ku, Tokyo, 113-0032, Japan Progress in Biotechnology (2002), 22 (Molecular Anatomy

of Cellular Systems), 105-120 CODEN: PBITE3; ISSN: 0921-0423

Elsevier Science B.V. PUBLISHER: Journal; General Review DOCUMENT TYPE:

English LANGUAGE:

A review. Plastids, plant organelles including chloroplasts, are considered to have originated from an endosymbiotic event of ancient cyanobacteria, the primeval inventor of the oxygen-generating photosyntems, in other eukaryotic cells. The vestiges of cyanobacterial genetic traits are found in both plastid and nuclear genomes. Significant nos. of original cyanobacterial genes evolutionarily disappeared from the plastid genome of extant plant cells; some have lost ever because of the dispensability, and the others have translocated onto the nuclear genome presumably for the regulatory reasons. One of the obstacles to unveil the coordinated gene expression between the two genomic systems, plastid and nucleus, was absence of the genetic information about the sigma subunit, a key factor of the plastid-encoded RNA polymerase (PEP). Actually all of the genes encoding for the multi-subunit core enzyme are found in the plastid genome, but the sigma factor gene is not. By scrutinizing the epigraphs depicted in the common sequences of sigma factors in cyanobacteria, we have successfully identified nuclear genes (sig) encoding for plastid sigma factors. This strategy was first adopted for unicellular red algae, Cyanidium caldarium RK-1, and then for three higher plants; two of typical dicotyledonous, Arabidopsis thaliana and Nicotiana tabacum, and one of monocotyledonous, Orysa sativa. Open reading frames found in the cDNA clones of these nuclear genes indicate that the N-terminal regions of the gene products had amino acid sequences typical to the plastid-targeting transit peptides. Furthermore, a transient expression assay of GFP fusions in Arabidopsis protoplasts showed that the N-termini of these sig gene products functioned as chloroplast-targeting signals. The sigA- or sigB-promoter fused with a uidA reporter in the transgenic Arabidopsis, was similarly activated at various tissues of the plants, such as cotyledons, hypocotyls, rosette leaves, sepals and siliques, but not at roots, seed, or other flower organs. Promoters including those from Cyanidium, Arabidopsis, and Nicotiana were repeatedly activated under continuous light, somewhat similar to endogenous rhythms. An Arabidopsis mutant (abc1) having a pale-green leaf phenotype presumably by the impaired sigB (= sig2) function was isolated as a T-DNA insertion clone. This result provides direct evidence that a nuclear-derived prokaryotic-like SigB protein plays a crit. role in the coordination of the two genomes for plastid development.

THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 31 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 23 SCISEARCH COPYRIGHT 2003 ISI (R)

2002:628040 SCISEARCH ACCESSION NUMBER:

THE GENUINE ARTICLE: 576TM

Cloning and characterization of the gene encoding the PepF TITLE:

endopeptidase from the aquatic bacterium Caulobacter

crescentus

Braz V S; Lang E A S; Marques M V (Reprint) AUTHOR:

Univ Sao Paulo, Inst Ciencias Biomed, Dept Microbiol, Av CORPORATE SOURCE:

Prof Lineu Prestes 1374, BR-05508900 Sao Paulo, Brazil (Reprint); Univ Sao Paulo, Inst Ciencias Biomed, Dept

Microbiol, BR-05508900 Sao Paulo, Brazil

COUNTRY OF AUTHOR:

Brazil SOURCE:

BRAZILIAN JOURNAL OF MICROBIOLOGY, (JAN-MAR 2002) Vol. 33,

No. 1, pp. 84-91.

Publisher: SOC BRASILEIRA MICROBIOLOGIA, AV PROF LINEU

PRESTES, 1374, 05508 SAO PAULO, BRAZIL.

ISSN: 1517-8382.

DOCUMENT TYPE:

Article; Journal

LANGUAGE:

English

REFERENCE COUNT:

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

The metallopeptidases have a very important role in bacteria, being AB involved in several processes that rely on protein turnover. such as nutrition, degradation of signal peptides. protein localization and virulence. We have cloned and characterized the gene of the metalloendopeptidase PepF from the aquatic bacterium Caulobacter crescentus. The gene upstream of pepF (orf1) encodes a conserved hypothetical protein found in Mycobacterium and Streptomyces. pepF is co-transcribed with the gene downstream (orf3), which encodes a protein that belongs to the ABC1 protein kinase family, suggesting that these two proteins may share a common function in the cell. The C. crescentus PepF protein possesses the conserved HEXGH motif present in zinc binding domains of PepF homologs. Disruption of the pepF gene by insertion of a vector sequence did not produced any growth defect, but the mutant strain possesses only 30% of the specific activity of endopeptidases present in the wild type strain. Deletions and point mutations in the regulatory region showed that there are two putative promoter regions, and the operon expression is independent of the transcription regulator CtrA. The results indicate that PepF is not essential for either growth or development of this bacterium using peptides as the sole carbon source, suggesting that other peptidases can be sharing this function.

ANSWER 6 OF 23 PROMT COPYRIGHT 2003 Gale Group

ACCESSION NUMBER:

2001:165878 PROMT

TITLE:

EUROPEAN PATENT DISCLOSURES. (Brief Article) BIOWORLD Today, (27 Feb 2001) Vol. 12, No. 39.

SOURCE: PUBLISHER:

American Health Consultants, Inc.

DOCUMENT TYPE:

Newsletter

LANGUAGE:

English

2102

WORD COUNT:

\*FULL TEXT IS AVAILABLE IN THE ALL FORMAT\*

January 3 (EP); December 28 (WO) AB

THIS IS THE FULL TEXT: COPYRIGHT 2001 American Health Consultants, Inc.

Subscription: \$1350.00 per year. Published daily (5 times a week).

ANSWER 7 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2001:816903 CAPLUS

DOCUMENT NUMBER:

135:353864

TITLE:

The promoter region of the ABC1

gene and therapeutic modulation of ABC1 gene

expression

INVENTOR(S):

Rosier-Montus, Marie-Francoise; Prades, Catherine; Lemoine, Cendrine; Naudin, Laurent; Denefle, Patrice;

Brewer, Bryan; Duverger, Nicolas; Remaley, Alan;

Santamarina-Fojo, Silvia

PATENT ASSIGNEE(S):

Aventis Pharma S.A., Fr. PCT Int. Appl., 152 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----\_\_\_\_\_ A2 20011108 A3 20020627 WO 2001-EP5488 20010502 WO 2001083746

WO 2001083746 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

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                           20011130
                                         FR 2001-5886
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                                         US 2001-846456
                                                           20010502
                           20021010
     US 2002146792
                      Α1
                           20030205
                                         EP 2001-943361
                                                          20010502
                      A2
     EP 1280911
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                           20021218
                                          NO 2002-5265
                                                            20021101
     NO 2002005265 A
                                       US 2000-201280P P 20000502
PRIORITY APPLN. INFO.:
                                        WO 2001-EP5488
                                                       W 20010502
     The present invention concerns a nucleic acid which is capable of
AΒ
     regulating the transcription of the ABC1 gene, which is a causal
     gene for pathologies linked to a dysfunctioning of cholesterol metab.,
     inducing diseases such as atherosclerosis. The invention also relates to
     nucleotide constructs comprising a polynucleotide which encodes a
     polypeptide or a nucleic acid of interest, placed under the control a
     regulatory nucleic acid for the ABC1 gene. The invention also
     relates to recombinant vectors, transformed host cells and nonhuman
     transgenic mammals comprising a nucleic acid which regulates the
     transcription of the ABC1 gene or an abovementioned nucleotide
     construct, as well as methods for screening mols. or substances which are
     capable of modifying the activity of the regulatory nucleic acid for the
     ABC1 gene. A reporter gene assay is used to screen for effectors
     of gene expression from the ABC1 promoter. An LXR
     element and an E box were found to be important for promoter
     function.
```

ANSWER 8 OF 23 CAPLUS COPYRIGHT 2003 ACS 2001:816687 CAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

135:353892

TITLE:

Nucleotide sequence of human ABC1 promoter and assays based thereon

INVENTOR(S):

Tall, Alan R.

PATENT ASSIGNEE(S):

The Trustees of Columbia University In the City of New

York, USA

SOURCE:

PCT Int. Appl., 68 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
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                                        ______
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                          20011108
                                       WO 2001-US13654 20010427
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            BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                     US 2000-560372 A 20000428
PRIORITY APPLN. INFO.:
    Disclosed is the sequence of the human ABC1
```

promoter, a method for expressing foreign DNA in host cells using the human ABC1 promoter, including a method of detg.

whether a chem. not previously known to be a modulator of the human ABC1 gene, and transcriptionally modulates the expression of the human ABC1 gene. Also disclosed is a sterol-responsive region of the human ABC1 promoter, along with a showing that it is activated by hydroxysterols and 9-cis-retinoic acid, implicating a

mechanism of activation involving LXR/RXR heterodimers.

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 1 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 9 OF 23 CAPLUS COPYRIGHT 2003 ACS 2001:167790 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER:

134:217169

TITLE:

Oxysterols for modulating HDL cholesterol and triglyceride levels by modulating LXR-mediated

transcription

INVENTOR(S):

Hayden, Michael R.; Brooks-Wilson, Angela R.;

Pimstone, Simon N.; Clee, Susanne M.

PATENT ASSIGNEE(S):

University of British Columbia, Can.; Xenon Genetics,

Inc.

SOURCE:

PCT Int. Appl., 316 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
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                   KIND DATE
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    WO 2001015676
                    A3
                          20020725
    WO 2001015676
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            CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
            HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
            LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
            SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
            ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
            DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
            CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                      EP 2000-974705 20000901
                    A2 20020918
    EP 1239848
           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL
PRIORITY APPLN. INFO.:
                                     US 1999-151977P P 19990901
                                     US 2000-526193 A 20000315
                                     US 2000-213958P P 20000623
                                                   W 20000901
                                     WO 2000-IB1492
```

The invention features methods for treating patients having low HDL, a AB higher than normal triglyceride level, or a cardiovascular disease by administering compds. that modulate ABC1 expression or activity. Compds. of the invention include oxysterols that modulate LXR-mediated transcription.

ANSWER 10 OF 23 MEDLINE

ACCESSION NUMBER:

2001200644 MEDLINE

DOCUMENT NUMBER:

21184766 PubMed ID: 11287605

TITLE:

Identification of liver X receptor-retinoid X receptor as an activator of the sterol regulatory element-binding

protein 1c gene promoter.

**AUTHOR:** 

Yoshikawa T; Shimano H; Amemiya-Kudo M; Yahagi N; Hasty A H; Matsuzaka T; Okazaki H; Tamura Y; Iizuka  $\bar{Y}$ ; Ohashi  $\bar{K}$ ; Osuga J; Harada K; Gotoda T; Kimura S; Ishibashi S; Yamada

CORPORATE SOURCE:

Department of Metabolic Diseases, University of Tokyo,

Bunkyo-ku, Tokyo 113-8655, Japan.

MOLECULAR AND CELLULAR BIOLOGY, (2001 May) 21 (9) SOURCE:

2991-3000.

Journal code: 8109087. ISSN: 0270-7306.

PUB. COUNTRY:

United States

DOCUMENT TYPE:

Journal; Article; (JOURNAL ARTICLE)

LANGUAGE:

English

FILE SEGMENT:

Priority Journals

ENTRY MONTH:

200105

ENTRY DATE: .

Entered STN: 20010521

Last Updated on STN: 20030204

Entered Medline: 20010517

In an attempt to identify transcription factors which activate AB sterol-regulatory element-binding protein 1c (SREBP-1c) transcription, we

screened an expression cDNA library from adipose tissue of SREBP-1 knockout mice using a reporter gene containing the 2.6-kb mouse SREBP-1 gene promoter. We cloned and identified the oxysterol receptors liver X receptor (LXRalpha) and LXRbeta as strong activators of the mouse SREBP-1c promoter. In the transfection studies, expression of either LXRalpha or -beta activated the SREBP-1c promoter -luciferase gene in a dose-dependent manner. Deletion and mutation studies, as well as gel mobility shift assays, located an LXR response element complex consisting of two new LXR-binding motifs which showed high similarity to an LXR response element recently found in the ABC1 gene promoter, a reverse cholesterol transporter. Addition of an LXR ligand, 22(R)-hydroxycholesterol, increased the promoter activity. Coexpression of retinoid X receptor (RXR), a heterodimeric partner, and its ligand 9-cis-retinoic acid also synergistically activated the SREBP-1c promoter. In HepG2 cells, SREBP-1c mRNA and precursor protein levels were induced by treatment with

22(R)-hydroxycholesterol and 9-cis-retinoic acid, confirming that endogenous LXR-RXR activation can induce endogenous SREBP-1c expression. The activation of SREBP-1c by LXR is associated with a slight increase in nuclear SREBP-1c, resulting in activation of the gene for fatty acid synthase, one of its downstream genes, as measured by the luciferase assay. These data demonstrate that LXR-RXR can modify the expression of genes for lipogenic enzymes by regulating SREBP-1c expression, providing a novel link between fatty acid and cholesterol metabolism.

ANSWER 11 OF 23 SCISEARCH COPYRIGHT 2003 ISI (R) DUPLICATE 1

ACCESSION NUMBER:

2001:856946 SCISEARCH

THE GENUINE ARTICLE: 484LW

TITLE:

An Arabidopsis sigma factor (SIG2)-dependent expression of

plastid-encoded tRNAs in chloroplasts

AUTHOR:

Kanamaru K; Nagashima A; Fujiwara M; Shimada H; Shirano Y; Nakabayashi K; Shibata D; Tanaka K; Takahashi H (Reprint)

CORPORATE SOURCE:

Univ Tokyo, Inst Mol & Cellular Biosci, Dept Mol Biol, Mol Genet Lab, Tokyo 1130032, Japan (Reprint); Tokyo Inst Technol, Dept Biol Sci, Yokohama, Kanagawa 2260026, Japan;

Mitsui Plant Biotechnol Res Inst, Tsukuba, Ibaraki

3050047, Japan; Univ Tokyo, Grad Sch Sci, Dept Sci Biol,

Tokyo 1130033, Japan

COUNTRY OF AUTHOR:

Japan

SOURCE:

PLANT AND CELL PHYSIOLOGY, (OCT 2001) Vol. 42, No. 10, pp.

1034-1043.

Publisher: OXFORD UNIV PRESS, GREAT CLARENDON ST, OXFORD

OX2 6DP, ENGLAND. ISSN: 0032-0781. Article; Journal

DOCUMENT TYPE:

English

LANGUAGE:

REFERENCE COUNT: 49

\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*

A eubacteria-type RNA polymerase (PEP) plays crucial roles for chloroplast development in higher plants. The core subunits are encoded on plastid DNA (rpo genes) while the regulatory sigma factors are encoded on

the nuclear DNA (SIG genes). However, the definite gene specificity of each sigma factor is unknown. We recently identified an Arabidopsis recessive pale-green mutant abc1 in which TDNA is inserted in SIG2 (sigB). In this mutant, almost normal etioplasts were developed under dark conditions while the small chloroplasts with poor thylakoid membranes and stacked lamellar were developed under light conditions. The sig2-1 mutant was deficient in accumulating enough photosynthetic and photosynthesis-related proteins as well as chlorophyll. However, mRNAs of their structural genes were not significantly reduced. Further analyses revealed that several plastid-encoded tRNAs including trnE-UUC that has dual function for protein and ALA biosyntheses were drastically reduced in the sig2-1 mutant. In contrast, nucleus-encoded T7 phage-type RNA polymerase (TNEP) dependent gene transcripts were steadily accumulated in the mutant. These results indicate that progress of chloroplast development requires SIG2-dependent expression of plastid genes, particularly some of the tRNA genes.

ANSWER 12 OF 23 PROMT COPYRIGHT 2003 Gale Group T.4

ACCESSION NUMBER:

2000:991956 PROMT

TITLE: SOURCE: EUROPEAN PATENT DISCLOSURES. (Brief Article) BIOWORLD Today, (10 Nov 2000) Vol. 11, No. 219.

PUBLISHER:

American Health Consultants, Inc.

DOCUMENT TYPE: LANGUAGE:

Newsletter English

1933 WORD COUNT:

\*FULL TEXT IS AVAILABLE IN THE ALL FORMAT\*

September 21 (WO) THIS IS THE FULL TEXT: COPYRIGHT 2000 American Health Consultants, Inc.

Subscription: \$1350.00 per year. Published daily (5 times a week).

ANSWER 13 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:911440 CAPLUS

DOCUMENT NUMBER:

134:81739

TITLE:

Compositions and methods for increasing cholesterol

efflux and raising HDL using human ATP binding

cassette transporter protein ABC1

INVENTOR(S):

Lawn, Richard M.; Wade, David; Garvin, Michael

PATENT ASSIGNEE(S):

CV Therapeutics, Inc., USA

SOURCE:

PCT Int. Appl., 214 pp.

DOCUMENT TYPE:

CODEN: PIXXD2

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	rent :	NO.		KIND DATE APPLICATION NO. DATE													
WO	2000	0789	72	A2 20001228					WO 2000-US16765 20000616								
WO	2000	0789	72	A:	3 :	20020502											
WO	2000	0789	72	C:	2 :	2002	0718										
	W:	ΑE,															
		CZ,	DE,	DK,	DM,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,
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		SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW,	AM,
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		CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			
BR	2000	0117	53	Α		2002	0430		Bl	R 20	00-1	1753	:	2000	0616		
ΕP	1218	515		A:	2 :	2002	0703		E	P 20	00-94	4291	4 :	2000	0616		
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,

IE, SI, LT, LV, FI, RO, MK, CY, AL NO 2001-6114 20011214 NO 2001006114 A 20020212 PRIORITY APPLN. INFO.: US 1999-140264P P 19990618 US 1999-153872P P 19990914 US 1999-166573P P 19991119 WO 2000-US16765 W 20000616

The present invention relates to novel human ABC1 polypeptides AB and nucleic acid mols. encoding the same. The invention also relates to recombinant vectors, host cells, and compns. comprising ABC1 polynucleotides, as well as to methods for producing ABC1 polypeptides. The invention also relates to antibodies that bind specifically to ABC1 polypeptides. In addn., the invention relates to methods for increasing cholesterol efflux as well as to methods for increasing ABC1 expression and activity. The present invention further relates to methods for identifying compds. that modulate the expression of ABC1 and methods for detecting the comparative level of ABC1 polypeptides and polynucleotides in a mammalian subject. The present invention also provides kits and compns. suitable for screening compds. to det. the ABC1 expression modulating activity of the compd., as well as kits and compns. suitable to det. whether a compd. modulates ABC1-dependent cholesterol efflux.

ANSWER 14 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:911439 CAPLUS

DOCUMENT NUMBER:

134:67162

TITLE:

Compositions and methods for increasing cholesterol

efflux and raising HDL using ATP binding cassette

transporter protein ABC1

INVENTOR(S):

Lawn, Richard M.; Wade, David; Oram, John F.; Garvin,

Michael

PATENT ASSIGNEE(S):

CV Therapeutics, Inc., USA; University of Washington

SOURCE:

PCT Int. Appl., 210 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
     PATENT NO.
                      KIND DATE
                                              _____
                             _____
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                                             WO 2000-US16591 20000616
                              20001228
     WO 2000078971
                        A2
     WO 2000078971
                        Α3
                              20020117
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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             SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM,
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             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                            EP 2000-942867 20000616
                        A2 20020327
     EP 1190065
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             IE, SI, LT, LV, FI, RO
                                                                 20000616
                                              BR 2000-11696
     BR 2000011696
                       Α
                              20020430
                                              NO 2001-6121
                                                                 20011214
                              20020212
     NO 2001006121
                        A
                                           US 1999-140264P P 19990618
PRIORITY APPLN. INFO.:
                                           US 1999-153872P P 19990914
                                           US 1999-166573P P 19991119
                                           WO 2000-US16591 W 20000616
```

The present invention relates to novel ABC1 polypeptides and AB nucleic acid mols. encoding the same. The invention also relates to recombinant vectors, host cells, and compns. comprising ABC1 polynucleotides, as well as to methods for producing ABC1

polypeptides. The invention also relates to antibodies that bind specifically to ABC1 polypeptides. In addn., the invention relates to methods for increasing cholesterol efflux as well as to methods for increasing ABC1 expression and activity. The present invention further relates to methods for identifying compds. that modulate the expression of ABC1 and methods for detecting the comparative level of ABC1 polypeptides and polynucleotides in a mammalian subject. The present invention also provides kits and compns. suitable for screening compds. to det. the ABC1 expression modulating activity of the compd., as well as kits and compns. suitable to det. whether a compd. modulates ABC1-dependent cholesterol efflux.

L4 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:666871 CAPLUS

DOCUMENT NUMBER:

133:262303

TITLE:

Human ABC1 transporter and DNA and methods

for modulating cholesterol levels and diagnosing

disease

INVENTOR(S):

Hayden, Michael R.; Wilson, Angela R.; Pimstone, Simon

N

PATENT ASSIGNEE(S):

University of British Columbia, Can.; Xenon

Bioresearch, Inc.

SOURCE:

PCT Int. Appl., 229 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

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APPLICATION NO. DATE
                   KIND DATE
    PATENT NO.
                                         _____
                    _ _ _ _
                          20000921
                                        WO 2000-IB532
                                                         20000315
    WO 2000055318
                     A2
                     A3
    WO 2000055318
                          20010322
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
            CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
            IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
            MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
            SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM
        RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,
            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
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                                       EP 2000-917240
                                                        20000315
                     A2 20010523
    EP 1100895
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                      US 1999-124702P P 19990315
                                      US 1999-138048P P
                                                         19990608
                                      US 1999-139600P P 19990617
                                      US 1999-151977P P 19990901
                                      WO 2000-IB532
                                                      W 20000315
```

The invention features ABC1 nucleic acids and proteins for the diagnosis and treatment of abnormal cholesterol regulation. The invention also features methods for identifying compds. for modulating cholesterol levels in an animal (e.g., a human). Thus, ABC transporter gene ABC1 of chromosome 9 has been identified as the gene involved in Tangier disease and familial HDL deficiency. Many polymorphisms, and mutations (deletion, substitution, nonsense, frameshift, and splicing-altering), have been identified. Many of these correlate with disease; some create/delete restriction sites. The cDNA for ABC1 has been cloned and sequenced. The protein encoded by the cDNA has an addnl. 60 amino acids relative to that previously reported: these extra amino acids were shown to be present in vivo and to play an essential part in the activity of the protein. The ABC1 protein has been shown to transport cholesterol. The ABC1 gene was found to have 49

The sequence of each exon with surrounding introns is

ANSWER 16 OF 23 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER:

2000:401986 CAPLUS

DOCUMENT NUMBER:

133:38258

TITLE:

Liver X receptors, retinoid X receptors, and the ABC-1 transporter in modulation of cholesterol metabolism

INVENTOR(S):

Mangelsdorf, David J.; Repa, Joyce J.; Dietschy, John

M.; Turley, Stephen D.

PATENT ASSIGNEE(S):

Board of Regents, the University of Texas System, USA

SOURCE:

PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND					ND	DATE APPLICATION N					ο.	. DATE					
									-								
WO 2000034461 A2					2	20000	20000615 WO 1999-US29497 19991210										
WO :	WO 2000034461 A3			3	20001109												
	W:	ΑE,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,
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		IN,	IS,	JΡ,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,
		SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VN,	YU,	ZA,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM								
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		CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG				
ORITY	APP	LN.	NFO.	:				Ţ	JS 19	998-:	11189	94P	A1	1998	1210		

PRIO The present invention relates to compns. and methods for reducing AB cholesterolemia and its effects. More specifically, the invention is directed, in one embodiment, to methods for screening for compds. that affect cholesterol levels generally, and in particular, that affect the absorption of cholesterol. The invention also is directed to methods of screening for compds. that increase bile acid synthesis. In so doing, the inventors describe useful transgenic cells and animals which lack one or both alleles of the liver x receptor-.alpha. (LXR.alpha.) gene. Also provided are therapeutic methods designed to reduce cholesterol levels in suitable subjects. The redn. may be effected by decreasing cholesterol absorption, increasing bile acid synthesis, or combinations thereof. Particularly useful in decreasing cholesterol absorption are retinoid X receptor (RXR) agonists, for example, rexinoid compds. Therapeutic intervention in cholesterol biosynthesis and diet are addnl. adjunct therapies. In addn., the present invention relates to candidate compds. that modulate the expression of ABC-1 in a cell that expresses RXR. Methods of identifying and making a modulator of ABC-1 are disclosed.

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ANSWER 17 OF 23 CAPLUS COPYRIGHT 2003 ACS
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ACCESSION NUMBER:

2000:227775 CAPLUS

DOCUMENT NUMBER:

132:275181

TITLE:

ATP-binding cassette genes and proteins for diagnosis and treatment of lipid disorders and inflammatory

INVENTOR (S): PATENT ASSIGNEE(S): Schmitz, Gerd; Klucken, Jochen Bayer Aktiengesellschaft, Germany

SOURCE:

PCT Int. Appl., 154 pp.

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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APPLICATION NO. DATE
                    KIND DATE
    PATENT NO.
                                          _____
                    _ - - -
                                          WO 1999-EP6991
                                                           19990921
                      A2
                           20000406
    WO 2000018912
                     A3
                           20000817
    WO 2000018912
        W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
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            MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
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            BY, KG, KZ, MD, RU, TJ, TM
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            DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,
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                           20000406
                                         CA 1999-2344107 19990921
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                                         EP 1999-969740
                                                           19990921
    EP 1115865
                      A2
                           20010718
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            IE, SI, LT, LV, FI, RO
                                          JP 2000-572359
                                                           19990921
                           20020813
    JP 2002525111
                     T2
PRIORITY APPLN. INFO.:
                                       US 1998-101706P P 19980925
                                                       W 19990921
                                       WO 1999-EP6991
```

Cholesterol-responsive genes are identified by the differential display method in human monocytes from peripheral blood that were subjected to macrophage differentiation and cholesterol loading with acetylated LDL and subsequent deloading with HLD3. In an initial screen ABCGA (ABC8), a member of the rapidly growing family of ABC (ATP-binding cassette) transport systems that couple the energy of ATP hydrolysis to the translocation of solutes across biol. membranes, was identified as a cholesterol-sensitive switch. ABCG1 is upregulated by M-CSF-dependent phagocytic differentiation but expression is massively induced by cholesterol loading and almost completely set back to differentiationdependent levels by HDL3. In a more detailed anal., 18 already characterized ABC members and 2 Fragment sequences were analyzed in monocyte/macrophage cells by RT-PCR as cholesterol sensitive. sensitive gene was ABCG1, which is the human homolog of the Drosophila white gene. Sequencing of the promoter of ABCG1 shows important transcription factor-binding sites relevant for phagocytic differentiation and lipid sensitivity. Antisense treatment of macrophages during cholesterol loading and HDL3-mediated deloading clearly identified ABCG1 as a cholesterol transporter. Among the other cholesterol-sensitive genes, ABCA1 (ABC1) was further characterized, and identified in the mouse as an interleukin-1.beta. transporter involved also in apoptotic cell processing. Modulation of the activity of transmembrane proteins belonging to the ATP binding cassette transporter protein family which are etiol. involved in cholesterol-riven atherogenic processes and inflammatory diseases like psoriasis, lupus erythematodes and others provides therapeutic means to treat such diseases. Furthermore, detection of herein identified ABC transporter proteins of their resp. biochem. activities involved in such atherogenic and inflammatory processes provides diagnostic means for clin. application of diagnosis and monitoring of dyslipidemias, atherosclerosis or inflammatory diseases like psoriasis and lupus erythematodes.

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L4 ANSWER 18 OF 23 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 2

ACCESSION NUMBER: 2000:646759 CAPLUS

DOCUMENT NUMBER: 134:158382

TITLE: Sterol-dependent transactivation of the ABC1

promoter by the liver X receptor/retinoid X

receptor

AUTHOR(S): Costet, Philippe; Luo, Yi; Wang, Nan; Tall, Alan R.

Division of Molecular Medicine, Department of Medicine, Columbia University, New York, NY, 10032,
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USA

Journal of Biological Chemistry (2000), 275(36), SOURCE:

28240-28245

CODEN: JBCHA3; ISSN: 0021-9258

American Society for Biochemistry and Molecular PUBLISHER:

Biology

Journal DOCUMENT TYPE: LANGUAGE: English

Tangier disease, a condition characterized by low levels of high d. AB lipoprotein and cholesterol accumulation in macrophages, is caused by mutations in the ATP-binding cassette transporter ABC1. cultured macrophages, ABC1 mRNA was induced in an additive fashion by 22(R)-hydroxycholesterol and 9-cis-retinoic acid (9CRA), suggesting induction by nuclear hormone receptors of the liver X receptor (LXR) and retinoid X receptor (RXR) family. We cloned the 5'-end of the human ABC1 transcript from cholesterol-loaded THP1 macrophages. When transfected into RAW macrophages, the upstream promoter was induced 7-fold by 22(R)-hydroxycholesterol, 8-fold by 9CRA, and 37-fold by 9CRA and 22(R)-hydroxycholesterol. Furthermore, promoter activity was increased in a sterol-responsive fashion when cotransfected with LXR.alpha./RXR or LXR.beta./RXR. Further expts. identified a direct repeat spaced by four nucleotides (from -70 to -55 base pairs) as a

binding site for LXR.alpha./RXR or LXR.beta./RXR. Mutations in this element abolished the sterol-mediated activation of the promoter The results show sterol-dependent transactivation of the ABC1 promoter by LXR/RXR and suggest that small mol. agonists of LXR

could be useful drugs to reverse foam cell formation and atherogenesis.

THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT: 40 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 19 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE L4

2000:438477 BIOSIS ACCESSION NUMBER:

PREV200000438477 DOCUMENT NUMBER: TITLE:

ABC1 gene expression and ApoA-I-mediated cholesterol efflux are regulated by LXR.

Schwartz, Karen; Lawn, Richard M.; Wade, David P. (1) AUTHOR (S):

(1) CV Therapeutics Inc., 3172 Porter Drive, Palo Alto, CA, CORPORATE SOURCE:

94304 USA

Biochemical and Biophysical Research Communications, SOURCE:

(August 11, 2000) Vol. 274, No. 3, pp. 794-802. print.

ISSN: 0006-291X.

Article DOCUMENT TYPE: English LANGUAGE: SUMMARY LANGUAGE: English

ATP-binding cassette transporter 1 (ABC1) mediates the active efflux of cholesterol from cells to apolipoproteins. To study the mechanisms of regulation of ABC1 gene expression, RAW 264.7 macrophages were transiently transfected with ABC1 promoter-luciferase reporter gene-fusion constructs. Transcription from a 1.64 kb fragment was induced by cholesterol loading but was not responsive to cAMP. Treatment of the cells with 9-cis retinoic acid or 20(S)-hydroxycholesterol, ligands for the nuclear receptors LXR and RXR, resulted in a marked induction of luciferase expression. The responsible control element was mapped to an imperfect direct repeat of the nuclear receptor half-site TGACCT separated by four bases (DR-4) that binds LXR/RXR heterodimers. Endogenous ABC1 gene expression in RAW

cells and apolipoprotein A-I mediated cholesterol efflux were also upregulated by both receptor ligands. These findings raise the possibility that ligands that activate the LXR-RXR heterodimer may be useful for the therapeutic modulation of the ABC1 pathway.

DUPLICATE 4

ANSWER 20 OF 23 CAPLUS COPYRIGHT 2003 ACS

2000:293507 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 133:188749 TITLE: Analysis of hABC1 gene 5' end: additional peptide

sequence, promoter region, and four

polymorphisms

AUTHOR(S): Pullinger, Clive R.; Hakamata, Hideki; Duchateau,

Philippe N.; Eng, Celeste; Aouizerat, Bradley E.; Cho,

Min H.; Fielding, Christopher J.; Kane, John P.

CORPORATE SOURCE: Department of Physiology, University of California,

San Francisco, CA, USA

SOURCE: Biochemical and Biophysical Research Communications

(2000), 271(2), 451-455

CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Academic Press

DOCUMENT TYPE: Journal LANGUAGE: English

AB Evidence linking mutations in ATP-binding-cassette transporter gene 1 (
ABC1) to Tangier disease suggests it functions in the active
transport of free cholesterol out of cells. Since its mRNA level is
regulated in response to cellular cholesterol stores, it is of interest to
explore its promoter response elements, and to investigate
polymorphisms for their contributions to the prevalence of low levels of
HDL in the population that promotes premature coronary heart disease.
Investigation of the 5' end of the gene by 5' RACE anal. revealed 455
nucleotides addnl. to published sequences, and predicts another
60 amino acid N-terminal residues, resulting in a 2261-residue protein.
Protein sequence anal. predicts a membrane-spanning region and

possible signal peptide. The 5' flanking region was located by a Human Research Project BLAST search. This region contains regulatory elements that potentially control ABC1 gene expression. In addn. to numerous SP1 binding sites there are four putative sterol regulatory

elements (SREs). Our studies uncovered three single nucleotide substitution polymorphisms, one in the **promoter** region and two in the 5' untranslated region (5'UTR), plus an insertion/deletion polymorphism. (c) 2000 Academic Press.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS

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L4 ANSWER 21 OF 23 MEDLINE DUPLICATE 5

ACCESSION NUMBER: 1999126354 MEDLINE

DOCUMENT NUMBER: 99126354 PubMed ID: 9927411

TITLE: An ATP-driven efflux pump is a novel pathogenicity factor

in rice blast disease.

AUTHOR: Urban M; Bhargava T; Hamer J E

CORPORATE SOURCE: Department of Biological Sciences, Purdue University, West

Lafayette, IN 47907, USA.

SOURCE: EMBO JOURNAL, (1999 Feb 1) 18 (3) 512-21.

Journal code: 8208664. ISSN: 0261-4189.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals
OTHER SOURCE: GENBANK-AF032443

ENTRY MONTH: 199903

ENTRY DATE: Entered STN: 19990326

Last Updated on STN: 19990326 Entered Medline: 19990316

AB Cells tolerate exposure to cytotoxic compounds through the action of ATP-driven efflux pumps belonging to the ATP-binding cassette (ABC) superfamily of membrane transporters. Phytopathogenic fungi encounter toxic environments during plant invasion as a result of the plant defense response. Here we demonstrate the requirement for an ABC transporter during host infection by the fungal plant pathogen Magnaporthe grisea. The ABC1 gene was identified in an insertional mutagenesis screen for pathogenicity mutants. The ABC1 insertional mutant and a gene-replacement mutant arrest growth and die shortly after penetrating

either rice or barley epidermal cells. The ABC1-encoded protein is similar to yeast ABC transporters implicated in multidrug resistance, and ABC1 gene transcripts are inducible by toxic drugs and a rice phytoalexin. However, abc1 mutants are not hypersensitive to antifungal compounds. The non-pathogenic, insertional mutation in ABC1 occurs in the promoter region and dramatically reduces transcript induction by metabolic poisons. These data strongly suggest that M.grisea requires the up-regulation of specific ABC transporters for pathogenesis; most likely to protect itself against plant defense mechanisms.

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DUPLICATE 6

ACCESSION NUMBER:

1998:536552 CAPLUS

DOCUMENT NUMBER:

129:271298

TITLE:

Organization of the ABCR gene: analysis of promoter and splice junction sequences

AUTHOR (S):

Allikmets, Rando; Wasserman, Wyeth W.; Hutchinson, Amy; Smallwood, Philip; Nathans, Jeremy; Rogan, Peter

K.; Schneider, Thomas D.; Dean, Michael

CORPORATE SOURCE:

Intramural Research Support Program, SAIC-Frederick,

Frederick, MD, 21702, USA Gene (1998), 215(1), 111-122

SOURCE:

CODEN: GENED6; ISSN: 0378-1119

PUBLISHER:

Elsevier Science B.V.

DOCUMENT TYPE:

Journal

English LANGUAGE:

Mutations in the human ABCR gene have been assocd. with the autosomal recessive Stargardt disease (STGD), retinitis pigmentosa (RP19), and cone-rod dystrophy (CRD) and have also been found in a fraction of age-related macular degeneration (AMD) patients. The ABCR gene is a member of the ATP-binding cassette (ABC) transporter superfamily and encodes a rod photoreceptor-specific membrane protein. The cytogenetic location of the ABCR gene was refined to 1p22.3-1p22.2. The intron/exon structure was detd. for the ABCR gene from overlapping genomic clones. ABCR spans over 100 kb and comprises 50 exons. Intron/exon splice site sequences are presented for all exons and analyzed for information content (Ri). Nine splice site sequence variants found in STGD and AMD patients are evaluated as potential mutations. The localization of splice sites reveals a high degree of conservation between other members of the ABC1 subfamily, e.g. the mouse Abc1 gene. Anal. of the 870-bp 5' upstream of the transcription start sequence reveals multiple putative photoreceptor-specific regulatory elements including a novel retina-specific transcription factor binding site. These results will be useful in further mutational screening of the ABCR gene in various retinopathies and for detg. the substrate and/or function of this photoreceptor-specific ABC transporter.

REFERENCE COUNT:

THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 23 OF 23 CAPLUS COPYRIGHT 2003 ACS

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DUPLICATE 7

ACCESSION NUMBER:

1988:107186 CAPLUS

DOCUMENT NUMBER:

108:107186

TITLE:

Sequence of the bacteriophage P22

anti-recBCD (abc) genes and properties of P22 abc

region deletion mutants

AUTHOR (S):

Murphy, Kenan C.; Fenton, Anita C.; Poteete, Anthony

CORPORATE SOURCE:

Med. Sch., Univ. Massachusetts, Worcester, MA, 01605,

SOURCE:

Virology (1987), 160(2), 456-64

DOCUMENT TYPE:

CODEN: VIRLAX; ISSN: 0042-6822

Journal English

LANGUAGE:

The nucleotide sequence of a segment of the phage P22 chromosome

to the left (downstream in the PL operon) of the erf gene was detd. Previous studies (A. C. Fenton and A. R. Poteete, 1984) have shown that this region encodes a function that is required for efficient growth of P22 in wild-type, but not in recB Salmonella. The gene or genes encoding this function were designated abc (anti-recBCD). The DNA sequence reveals 3 open reading frames that potentially encode polypeptides with mol. wts. of 10,900, 11,600, and 6600 (in order of transcription). P22 deletion mutants lacking each of the open reading frames were constructed. In addn., plasmids were constructed placing each of the open reading frames under control of the lac UV5 promoter. The phenotypes of the deletion mutants, and the results of plasmid-phage copmlementation tests, indicate that Abc activity depends primarily on sequences that encode the 11.6-kDa polypeptide; the 10.9-kDa polypeptide-encoding sequence makes a minor contribution to Abc activity as well. These sequences have been designated abc2 and abc1, resp. The 6.6-kDa polypeptide is apparently uninvolved.